

REMARKS

Claims 1-18 are pending. By this response, claims 1, 7, 8 and 11 have been amended and claims 15-18 have been added. Claims 1-14 stand allowed. Allowance of claims 1-18 is respectfully requested in view of the following remarks.

The Examiner has provided a Quayle action in which claims 1, 7 and 11 have been objected due to minor informalities. In response to the Quayle action, applicant has amended claims 1, 7 and 11 so that the acronyms "NEXT" and "FEXT" are described therein. Also, line 21 of claim 1 has been amended to now recite "when the NEXT noise" instead of "when the FEXT noise". Therefore, the claims are now in proper condition for allowance. Accordingly, withdrawal of the objections are respectfully requested.

Along with the amendments to the claims to correct for the informalities presented by the Examiner, applicant makes minor amendments to claims 1, 7, 8 and 11 to clarify the features therein. Further, claims 15-18 have been added. Applicant submits that the minor changes to claims 1, 7, 8 and 11 and the addition of claims 15-18 do not change the scope of the claims, are not new matter and would not require a further search. The reasons set forth by the Examiner for allowing claims 1-14 are still present in the claim limitations. Further, these features are presented in the newly added claims. Accordingly, applicant respectfully submits that the application is in condition for

allowance. Favorable consideration and prompt allowance are earnestly solicited.

CONCLUSION

Should there be any outstanding matters that need to be resolved in the present application, the Examiner is respectfully requested to contact Chad J. Billings (Reg. No. 48,917) at the telephone number of the undersigned below.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37 C.F.R. §§ 1.16 or 1.17; particularly, extension of time fees.

Respectfully submitted,

BIRCH, STEWART, KOLASCH & BIRCH, LLP

By: 

Michael K. Mutter

Reg. No. 29,680

P.O. Box 747

(703) 205-8000

Falls Church, VA 22040-0747

MKM/ČJB:cb

Attachment: Version with Markings to Show Changes Made



VERSION WITH MARKINGS TO SHOW CHANGES MADE

IN THE CLAIMS

Kindly replace claims 1, 7, 8 and 11 with the following.

Claim 1. (Amended)

A digital [communications] communication device for [optimally] correcting transmission path characteristics containing noise transmitted from a plurality of half-duplex communication devices via a half-duplex transmission path, said device comprising:

a near-end cross talk (NEXT) noise coefficient table, in which are stored equalizing coefficients of equalizers for [optimally] correcting characteristics of a transmission path containing a NEXT noise transmitted from a near-end half-duplex communication device that is on side near to [a main] the digital communication device among said plurality of half-duplex communication devices;

a far-end cross talk (FEXT) noise coefficient table, in which are stored equalizing coefficients of equalizers to [optimally] correct characteristics of a transmission path containing a FEXT noise transmitted from a far-end half-duplex communication device that is on side far from the [main] digital communication device among said plurality of half-duplex communication devices; and

equalizers for correcting transmission path characteristics based on the equalizing coefficients in the NEXT noise coefficient table when the NEXT [FEXT] noise has been transmitted from said near-end half-duplex communication device, and on the other hand, for correcting transmission path characteristics based on the equalizing coefficients in the FEXT noise coefficient table when the FEXT noise has been transmitted from said far-end half-duplex communication device.

Claim 7. (Amended)

A digital communication device for [optimally] correcting, when receiving data, characteristics of a transmission path containing noise transmitted from a plurality of half-duplex communication devices transmitting via half-duplex transmission paths; said device comprising:

a far-end cross talk (FEXT) noise coefficient table, in which are stored equalizing coefficients of equalizers to [optimally] correct characteristics of a transmission path containing a FEXT noise, and not containing a near-end cross talk (NEXT) noise, transmitted from a far-end half-duplex communication device that is on side far from the digital communication [a main] device among said plurality of half-duplex communication devices; and equalizers for correcting transmission path characteristics based on

equalizing coefficient in said FEXT noise coefficient table when a NEXT noise

has been transmitted from a near-end half-duplex communication device, being one of said plurality of half-duplex communication devices, which is near to the [main] digital communication device, and when the FEXT noise has been transmitted from said far-end half-duplex communication device.

Claim 8. (Amended)

The digital communication device according to claim 7, wherein said digital communication device is a terminal end device for transmitting after synchronizing communications between said half-duplex communication devices, and when the NEXT noise has been transmitted from said near-end half-duplex communication device on a terminal end while data is traveling upstream on said half-duplex transmission path from a terminal end to a central office end, [it] the terminal end device corrects transmission path characteristics based on equalizing coefficients in said FEXT noise coefficient table applied to said equalizers, and, on the other hand, when the FEXT noise has been transmitted from said far-end half-duplex communication device on the central office end while data is traveling downstream on the half-duplex transmission path from the central office end to the terminal end, said device corrects the transmission path characteristics based on equalizing coefficients in said FEXT noise coefficient table applied to said equalizers.

Claim 11. (Amended)

A digital communication device for [optimally] correcting, when receiving data, characteristics of a transmission path containing noise transmitted from a plurality of half-duplex communication devices transmitting via half-duplex transmission paths; said device comprising:

a far-end cross talk (FEXT) noise coefficient table in which are stored equalizing coefficients of equalizers to [optimally] correct characteristics of a transmission path containing FEXT noise transmitted from a far-end half-duplex communication device that is on side far from [a main] the digital communication device among said plurality of half-duplex communication devices; and

equalizers for correcting transmission path characteristics containing said FEXT noise based on equalizing coefficient in said FEXT noise coefficient table; [and]

wherein the device receiving data only while said FEXT noise is being transmitted.

Claims 15-18 have been added.